

CLAIMS:

What is claimed is:

- 1 1. A method, in a requested file system server, for
2 servicing a request, comprising:
3 receiving a request for a referencing object from a
4 client, wherein the referencing object refers to a
5 referenced file system;
6 looking up a location of the referenced file system
7 in a separate data structure; and
8 returning a redirection message indicating the
9 location of the referenced file system to the client.
- 1 2. The method of claim 1, wherein the redirection
2 message includes an address of a referenced file system
3 server.
- 1 3. The method of claim 2, wherein the redirection
2 message further includes a path.
- 1 4. The method of claim 2, wherein the referencing
2 object has a file system identifier.
- 1 5. The method of claim 4, further comprising:
2 encoding the file system identifier,
3 wherein the redirection message further includes the
4 encoded file system identifier.

1 6. The method of claim 5, wherein the referencing
2 object is a top level object for a uniform namespace
3 including all file systems on participating file system
4 servers.

1 7. The method of claim 2, wherein the referenced file
2 system server is the requested file system server.

1 8. The method of claim 1, wherein the separate data
2 structure comprises a file system location database.

1 9. The method of claim 1, further comprising:
2 receiving a redirected request for a file system
3 object;
4 identifying an encoded file system identifier in the
5 redirected request;
6 decoding the encoded file system identifier to form
7 a file system identifier corresponding to a requested
8 file system;
9 looking up a path for the requested file system in a
10 file system identifier data structure; and
11 retrieving the root of the requested file system
12 using the path for the requested file system.

1 10. The method of claim 9, wherein the file system
2 identifier data structure comprises a file system
3 identifier table.

1 11. The method of claim 9, wherein the separate data
2 structure and the file system identifier data structure
3 are stored in a file system location database.

1 12. The method of claim 1, wherein the referencing
2 object is a top level object for a uniform namespace
3 including all file systems on participating file system
4 servers.

1 13. A method, in a requested file system server, for
2 servicing a request, comprising:
3 receiving a request for a file system object,
4 wherein the request includes an encoded file system
5 identifier;
6 decoding the encoded file system identifier to form
7 a file system identifier corresponding to a requested
8 file system;
9 looking up a path for the requested file system in a
10 file system identifier data structure; and
11 retrieving the root of the requested file system
12 using the path for the requested file system.

1 14. The method of claim 13, wherein the file system
2 identifier data structure is stored in a table.

1 15. The method of claim 13, wherein the file system
2 identifier data structure is stored in a file system
3 location database.

1 16. An apparatus, in a requested file system server, for
2 servicing a request, comprising:

3 receipt means for receiving a request for a
4 referencing object from a client, wherein the referencing
5 object refers to a referenced file system;

6 location means for looking up a location of the
7 referenced file system in a separate data structure; and

8 return means for returning a redirection message
9 indicating the location of the referenced file system to
10 the client.

1 17. The apparatus of claim 16, wherein the redirection
2 message includes an address of a referenced file system
3 server.

1 18. The apparatus of claim 17, wherein the redirection
2 message further includes a path.

1 19. The apparatus of claim 17, wherein the referencing
2 object has a file system identifier.

1 20. The apparatus of claim 19, further comprising:
2 encoding means for encoding the file system
3 identifier,
4 wherein the redirection message further includes the
5 encoded file system identifier.

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1 21. The apparatus of claim 20, wherein the referencing
2 object is a top level object for a uniform namespace
3 including all file systems on participating file system
4 servers.

1 22. The apparatus of claim 17, wherein the referenced
2 file system server is the requested file system server.

1 23. The apparatus of claim 16, wherein the separate data
2 structure comprises a file system location database.

1 24. The apparatus of claim 16, further comprising:
2 means for receiving a redirected request for a file
3 system object;
4 means for identifying an encoded file system
5 identifier in the redirected request;
6 means for decoding the encoded file system
7 identifier to form a file system identifier corresponding
8 to a requested file system;
9 means for looking up a path for the requested file
10 system in a file system identifier data structure; and
11 means for retrieving the root of the requested file
12 system using the path for the requested file system.

1 25. The apparatus of claim 24, wherein the file system
2 identifier data structure comprises a file system
3 identifier table.

1 26. The apparatus of claim 24, wherein the separate data
2 structure and the file system identifier data structure
3 are stored in a file system location database.

1 27. The apparatus of claim 16, wherein the referencing
2 object is a top level object for a uniform namespace
3 including all file systems on participating file system
4 servers.

1 28. An apparatus, in a requested file system server, for
2 servicing a request, comprising:

3 receipt means for receiving a request for a file
4 system object, wherein the request includes an encoded
5 file system identifier;

6 decoding means for decoding the encoded file system
7 identifier to form a file system identifier corresponding
8 to a requested file system;

9 path means for looking up a path for the requested
10 file system in a file system identifier data structure;
11 and

12 retrieval means for retrieving the root of the
13 requested file system using the path for the requested
14 file system.

1 29. The apparatus of claim 28, wherein the file system
2 identifier data structure is stored in a table.

1 30. The apparatus of claim 28, wherein the file system
2 identifier data structure is stored in a file system
3 location database.

1 31. A computer program product, in a computer readable
2 medium, for servicing a request, comprising:
3 instructions for receiving a request for a
4 referencing object from a client, wherein the referencing
5 object refers to a referenced file system;
6 instructions for looking up a location of the
7 referenced file system in a separate data structure; and
8 instructions for returning a redirection message
9 indicating the location of the referenced file system to
10 the client.

1 32. A computer program product, in a computer readable
2 medium, for servicing a request, comprising:
3 instructions for receiving a request for a file
4 system object, wherein the request includes an encoded
5 file system identifier;
6 instructions for decoding the encoded file system
7 identifier to form a file system identifier corresponding
8 to a requested file system;
9 instructions for looking up a path for the requested
10 file system in a file system identifier data structure;
11 and

12 instructions for retrieving the root of the
13 requested file system using the path for the requested
14 file system.

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